scientists, would result, if adopted by the Commission, in far more than 'a slight amount of inconvenience', or even 'some initial inconvenience'.

The name *mytilaspidis* has been used in hundreds of biological, ecological and applied biological control papers. Systematists, myself included, would of course not find it difficult to adapt to its replacement by an obsolete name such as *albidus*. However, numerous field biologists all over the world, who do not read taxonomic papers unless they are forced to do so, would be confused. It would take them years to realise that the enormous amount of practical information on *mytilaspidis* should now be referred to *albidus*. How on earth would this 'undoubtedly stabilise the nomenclature'? What would be gained, except for the upholding of the Principle of Priority?

So, it is not out of sentimentality that I favor the junior (100-year-old) synonym in this case. It is only out of my concern for the users of systematic information, and for the respect that they may or may not have for the science and practice of systematics, that I recommend the suppression of *albidus* in favor of *mytilaspidis*. In my opinion the careless replacement of well-established names by long-forgotten senior synonyms would only serve to deepen the unfortunate rift between field biologists and some systematists. For the sake of systematics, let us not alienate those who depend on us for a stable nomenclature.

COMMENTS ON THE PROPOSAL THAT THE GENERIC NAME *CHROMIS* CUVIER, 1814 (OSTEICHTHYES) SHOULD BE MASCULINE.

Z.N.(S.)2329

(see vol. 37, pp. 247–255)

(1) By Sven O. Kullander (*Swedish Museum of Natural History, Stockholm S–104 05, Sweden*)

I object to the proposal by Bailey and others because I consider it directed against stability of nomenclature and totally unwarranted. The case is of interest to me as a specialist working on South American CICHLIDAE. Most of the genera with names ending in *–chromis* are in this family. My opinion is based on the following considerations:

(1) Emery, 1975, has shown that (a) the gender of the Greek noun chromis is variable, at least in usage; (b) Cuvier treated the generic name *Chromis* as feminine when he established it, and (c) the gender of generic names ending in *–chromis* is to be determined from authors' statements or indications. He pointed out that almost uniform treatment of this name as masculine in the ichthyological literature does not make it necessary to refer the name to the Commission; *Chromis* is a major genus of the POMACENTRIDAE, where the nomenclature is already confused.

I agree with (a), (b) and (c) above and consequently feel that the problem has already been solved by Emery's 1975 paper, which has guided usage in the matter of the gender of *Chromis* for nearly ten years. Acceptance of the proposal by Bailey *et al.* would have a negative effect on stability and cast doubt on the ability of active working taxonomists to take nomenclatural decisions in accordance with the Code.

(2) Bailey *et al.* ask that *Chromis* be ruled to be masculine in line with prevalent usage, and that names ending in *–chromis* be ruled to be masculine because most such names are so treated. They say that unless unity is imposed, authors and

editors, and such users as ethologists and aquarists will experience difficulty. I do not find these arguments either logical or strong.

I agree that it is convenient that all generic names ending in *–ops* should be masculine, but such names are found throughout the animal kingdom. *Chromis* and names ending in *–chromis* are found only in a relatively small number of perciform fishes. The two cases are not comparable and the comparison of them by Bailey *et al.* is not valid. It would be more straightforward to rule that all generic names must be masculine.

(3) Bailey *et al.* make much of the fact that *Papiliochromis* Kullander, the only generic name ending in *–chromis* originally stated to be feminine, is invalid. I cannot accept this, because the alleged senior synonym cited by Bailey *et al.* is an unavailable name. Furthermore, *Papiliochromis* contains a species with a feminine adjectival name, *P. altispinosa* (see Kullander, 1981).

(4) Bailey *et al.* list six valid pomacentrid generic names ending in *–chromis*. These genera contain nine species between them. Since, according to their list, *Chromis* has over 50 species, it would be more logical to ask that all these names be feminine, rather than the reverse.

The 38 valid genera of cichlids listed by Bailey *et al.* with names ending in *–chromis* are mostly small. Only five of them have more then five species. One hundred and twenty-nine species are involved, but many have patronymic names or nouns in apposition. Moreover, as indicated by Bailey *et al.*, there is much nomenclatural shifting in the CICHLIDAE following recent revisions. I find no case for a change in the gender of *Chromis*. On the other hand, the secondary reports on these revisions offer an excellent opportunity for the publication of a manual of genders of cichlid names, which would be useful to those people that Bailey *et al.* think would find difficulties.

There are other gender problems in the CICHLIDAE that would make such a manual desirable, apart from the *–chromis* problem. Examples are: names ending in *–acara* from Amerindian Acará (masculine), usually treated as feminine; names ending in *–cara* from Greek cara (neuter), usually treated as feminine; names ending in *–odon* (masculine), occasionally treated as feminine or neuter.

To sum up: (a) *Chromis* Cuvier, 1814 is feminine under Article 30a(i) (2); (b) Emery's 1975 paper gives guidance in this matter. It was published in a widely distributed journal (*Copeia*) and no facts have emerged to show that his conclusions are incorrect; (c) it has not been shown that problems would arise from treating *Chromis* as feminine and names ending in *–chromis* as masculine where appropriate.

I therefore recommend that the Commission reject proposal 6(1) of Bailey *et al.* and the relevant part of 6(2).

ADDITIONAL REFERENCE

KULLANDER, S. O. 1981. The Bolvian (sic) ram; a zoogeographical problem and its taxonomic solution. *DCG–Inf.*, vol. 12, pp. 61–79.

(2) By Alan R. Emery (*National Museum of Natural Sciences, Ottawa, Canada*)

Bailey *et al.* have asked the Commission to rule that the gender of *Chromis* be masculine in spite of their admission that the correct gender under the Code is feminine, as pointed out by Emery, 1975. They also accept that only the name

Chromis is affected by Emery's conclusion; the gender of generic names ending in *–chromis* is determined by the original author's indications. They also agree that this is so because chromis is of variable gender and thus the gender of any name ending in that word is subject to the arbitrary decision of the author of the name. Only in cases where there is no indication of gender from any included specific name could there be confusion. But that case too is nicely governed by the Code, which provides that such names must be automatically masculine. This happens to be the gender Bailey *et al.* desire. They also established, with the help of a classical scholar, Dr H. D. Cameron, of the University of Michigan, that chromis may be either masculine or feminine.

2. Emery, 1975, pointed out that others, while accepting the correctness of his conclusions, did not agree with his course of action.

3. The essence of the request by Bailey *et al.* seems to be pragmatism. Thus, they say '. . . we may anticipate varied use in the future and needless difficulty for authors and editors alike' and '. . . the adjectival accorded to each new species in a genus ending in *–chromis* will vary with each author's view'.

4. They defend the view that there will be a dichotomy of gender used by noting the recent description of a cichlid genus, *Papiliochromis* Kullander, 1977, which the author chose to be feminine; a choice which, under the Code, was his to make. They also point to the fact that *Chromis* has been variously considered masculine or feminine through the years. Only two of the works they cite post-date Emery, 1975, and both use the masculine gender, as was usual before Emery's paper.

5. Bailey *et al.* defend their pragmatic stance by noting the numerous species (probably of the order of 500 or more) that have *–chromis* in their generic names, and whose endings could thus be affected. They imply that such instability will be an inevitable result of the strict application of the Code.

6. I disagree with that conclusion and believe that the rules of the Code are clear and do not promote instability for the following reasons:

(a) The Code states that, for names derived from words of variable gender, the original describer should state or indicate the gender to be used. Thenceforth the gender of that particular name is stable. If the gender is not stated or indicated by the author it is masculine by default. This rule also applies to compound words; thus any *–chromis* name for which the author did not fix the gender is masculine by default (Article 30a(i) (2)). This is not the case for *Chromis:* the decision was made by the original describer.

(b) It is not necessary to conclude that Kullander, 1977, was influenced by Emery, 1975, in choosing feminine for his new name *Papiliochromis*. He gives no reason for his choice and may just as easily have been influenced by the gender of the name of its closest relative, *Apistogramma* [correctly neuter, Ed.] as by Emery's paper, which he did not cite. Emery specifically stated: 'Several have worried that if *Chromis* is changed to feminine it could affect the nomenclature of other groups, such as the cichlids, particularly *Hemichromis* and *Haplochromis*, but these fears are unfounded because the gender of each generic name must be considered independently, based on the author's use. It happens that *Hemichromis* and *Haplochromis* remain masculine'.

(c) The fact that a generic name has fixed the ending of a specific name in no way makes that ending sacrosanct. If the species is found to belong more properly in another genus, it takes the ending appropriate to the gender of the new generic name. This may be inconvenient for non-taxonomists familiar with the old spelling, but it does not detract from the long-term stability of nomenclature. Bailey *et al.* chose a particularly unfortunate example in citing *Haplochromis* 'with approximately 300 species'. This genus has recently been restricted to only five species by Greenwood (1979, p. 317), one of the authors of Bailey *et al.* He suggested that the remaining species be transferred to other genera. He recommended transferring one particularly large assemblage from Lake Malawi to *Cyrtocara*, a genus with a non-masculine name. Thus the genus with the most contentious name (for Bailey *et al.*) is no longer relevant and all the species they hoped would not have the endings changed are liable to be changed anyway, and perhaps only temporarily.

7. Several criticisms of Emery (1975) by Bailey *et al.* can be rebutted:

(a) They wrongly claim that Emery regarded Desmarest, 1814, to be non-binominal. He specifically dated *Chromis* from that work, which he could not have done if he had regarded it as non-binominal. He cited non-binominal uses of *Chromis* by Browne, 1756 and of *Chromis* by Lacepède, 1802.

(b) They claim that Cuvier was inconsistent in his treatment of *Chromis* as feminine. I find no such inconsistencies. In 1814, in Desmarest, he referred seven species to the genus, but only two of their names (both new, and both feminine) are combined with *Chromis*; the others are combined with the names of the genera (*Labrus, Sparus*) from which they were transferred. Many species now placed in *Chromis* were described in *Heliases*, which is masculine.

(c) Emery did indeed note the use of feminine endings in the 1960 and masculine endings in the 1970 editions of Bailey *et al.* He refrained from pointing out the inconsistencies in gender endings in the 1960 edition.

(d) The spelling 'Desmarets' for 'Desmarest' was taken from a French work (Hureau & Monod, 1973, p. 424) because I had no access to the original work. 'Desmarest' is, of course, correct.

8. The proposal by Bailey *et al.*, 1980, dealing with an issue where the Code gives a clearly defined answer, can only lead to confusion and to further requests to except nomenclaturally impeccable names from the application of the Code. I therefore ask the Commission not to use the plenary powers to rule that *Chromis* and names ending in *-chromis* are masculine but to let the rules of the Code apply.

ACKNOWLEDGEMENT

It is a pleasure to acknowledge the diligent help of Dr R. Winterbottom in criticizing this manuscript. Part of this study was supported by a Natural Sciences and Engineering Research Council Grant to the author.

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